

White paper



Customer Information Management

# Maximize banking relationships with a single customer view.

When banks can see the whole picture, opportunities are revealed.



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As banks strive to differentiate themselves in an increasingly digital marketplace, they require more efficient ways to connect with customers. Retention, upsell and cross-sell are all critical to success. That means it's more important to understand each customer in context...across accounts, geographies, relationships, demographics and more. To treat each customer as an individual, you need to understand each customer as an individual, and that requires real-time access to a comprehensive single customer view.

Various solutions have promised easy access to robust, contextual customer insight. However, these traditional data-management solutions are holding most banks back. Rigid, relational database structures aren't built to deliver the agile, comprehensive view today's markets require. It takes a game-changing approach to gain a true 360°-degree view of your customers. Transformational graph-database technology holds the key.



From NASA to Facebook, Amazon and more, organizations are harnessing the power of graph databases. Now bankers are putting graph to work to gain a true single customer view.

## The relationship imperative

When you can see each customer in the context of their accounts, behaviors, geography and demographics, you can engage them in more timely and effective ways. This is increasingly essential for banks today:

- It's become easier for customers to transfer their accounts to another bank or spread their accounts across different institutions.
- More nontraditional services are now competing for the same banking pie.
- Innovators like Amazon and Facebook have ushered in an era of astounding customer experiences, and consumers expect nothing less from their banks.

If you're determined to grow share of wallet (and stave off commoditization), you'll need to excel at delivering highly relevant, personalized engagement. This type of compelling, individualized engagement requires an efficient way to connect data across silos, improve data quality and easily enrich your data. Only then can you inform every interaction, accelerating insight, analysis and automation across every aspect of your business.

*"Over 70% of financial institutions globally place 'improving the customer experience' as one of their top three strategic priorities in 2017."<sup>1</sup>*

## The single-view struggle

It's easy to point out the need for an authoritative single view of each customer. Achieving that view has not been so simple.

Most banks face a similar set of challenges. When data is inaccurate, inconsistent or incomplete, it's difficult to integrate and put to use. Separate, siloed systems for deposit accounts, credit cards, loans, billing and more form an increasingly complex, disjointed technological ecosystem. Each system utilizes different data requirements and formats. Various lines of business, mergers and acquisitions can increase duplication and conflict. Add in data-entry issues, different lines of business and regional differences, and it's clear why it can seem impossible to achieve an accurate, actionable single customer view.

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## What you could do with a single view

Make the right offer to the right customer at the right time through the right channel when you gain the view that lets you:

- Streamline interactions.
- Enhance self-service.
- Identify best next offers.
- Target with precision.
- Boost digital engagement.
- Uncover risk.



## Technology's broken promises

Over the past few decades, various solutions have been offered as the cure for these data-management challenges. However, structurally each has failed to deliver the customer view that financial services organizations require.

**Data warehousing** allegedly “allows a company or organization to create a consolidated view of its enterprise data”. However, insurers typically find that this solution doesn't go far enough. At its core, data warehousing utilizes a traditional relational-database structure: It starts with a framework of expected elements (fields and pre-set relationships), then it's populated with data. The framework is rigid, and that makes it costly and difficult to modify.

- You may have different systems and databases for different types of accounts.
- You may collect different types of customer information according to different requirements, or via different channels.
- New types of data (demographic, geographic, etc.) may become available.

If you didn't anticipate these variations when developing your data-warehouse framework, it could take months or years to integrate the information later. A rigid approach can't “see” across silos to provide a usable view of the many connections between various customer touchpoints and interactions.

*Customer insight and data analytics is at the foundation of virtually every retail banking trend in the coming year. From removing friction from the customer journey, to improving multichannel delivery and exploring the use of open APIs, data is the fuel that will power these initiatives.<sup>2</sup>*

**CRM systems** have their limitations too. While intended as repositories for enterprise-wide customer information, these systems often include only a partial view. For example, one CRM system might contain investment information, but no information on mortgages or credit cards. With incomplete information, you can't hope to get a 360° view of each customer relationship. CRM systems, like data warehouses, are also built on rigid, relational-database frameworks, so they're also costly and time-consuming to change.

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## The pressure of rising expectations

Fixing your data-management challenges is more important than ever. Today's customers, accustomed to the instant connections they find via the likes of Amazon and Facebook, expect a higher level of awareness and agility from their banks. They believe you should know them, and provide them with consistent, personalized experiences across every touchpoint. Yet, today there are more channels and potential forms of engagement. The volume, velocity and variety of available data is increasing exponentially. Unstructured data such as text and social media adds a new level of complexity. Your traditional approach to data management is under increasing strain. These growing challenges require a dramatically different approach, and those that make the change can gain a true competitive edge.

## Revolutionize your data management.

There's a new, game-changing type of database that's transforming customer information management. These graph databases build themselves around relationships rather than forcing data into rigid frameworks. They connect the dots or "nodes" across a wide variety of data types, formats, categories and systems, finding the commonalities and revealing latent relationships and patterns. This means that you no longer need to map out all possible relationships and attributes in advance. The graph approach literally builds itself as relationships occur.

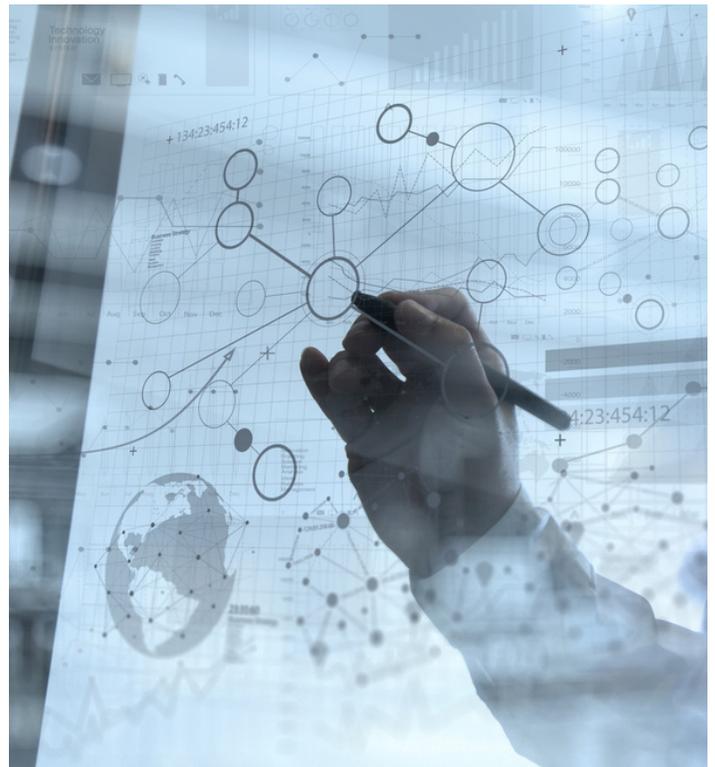
### Optimize your existing infrastructure.

You've got lots of data lodged in a variety of systems and databases across your organization. With a graph database, you can build on what you have already in place. You'll gain real-time visibility of customer information across your organization's different lines of business, systems, databases and channels, even tapping into unstructured data. With no need to rip and replace, the graph approach connects you to an authoritative single view.

This approach is designed to help you perform more informed analytics for planning and segmentation, and deliver more relevant and personalized customer engagement. It helps in automating and expediting onboarding and qualification of new accounts. It provides the intel for more targeted campaigns and can uncover patterns to facilitate risk management and expose potential fraud. You can gain operational efficiencies, inform self-service experiences and expedite customer care.

### Market with new agility.

With a graph database, it's easy to examine your data across multiple dimensions. A traditional relational database struggles and slows as you add attributes, while a graph database can handle complex inquiries at lightning speed. You can project a customer's needs and risk based on his or her stage of life, finances, banking behavior, geographic location, household relationships and more. Then, you can engage each customer more efficiently and effectively across every touchpoint.



## Enjoy built-in data quality.

Suboptimal data-management solutions are a barrier to effective marketing and service. With siloed systems, duplicate efforts are likely, and data improvements are difficult to share. The long-elusive single customer view positions banks to capitalize on revenue opportunities:

An optimal graph-database approach uncovers incidences of customer data across the organization and corrects, standardizes and links them. Look for solutions that integrate graph and robust data-quality capabilities within a single platform.

- Discovery
- Profiling
- Metadata
- Global address management

You'll improve the quality of your data as well as your customer perspectives.

*"Gartner measures the average financial impact of poor data on businesses at \$9.7 million per year. These costs, however, are not solely financial; businesses can see loss of reputation, missed opportunities and higher-risk decision making as a result of low confidence in data."*<sup>3</sup>

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## See the connections.



Many of today's consumers prefer the convenience of digital self-service. They may also connect with you via multiple channels, even simultaneously. So, you need to present a seamless experience that's timely, consistent and compelling across every touchpoint. A graph-database approach offers a level of real-time agility and insight that's virtually unattainable via a more traditional approach.



You buy a new list of prospects but some may already be your customers. You want to know who those are so you don't send them a campaign that addresses them like strangers. With a graph-database approach, it's easy to reconcile the data, even if it's in different formats.



Consider the woman who marries and takes her husband's name. If she updates her name for one account, a traditional database approach may fail to uncover other updates required across her accounts. This can lead to redundant and even conflicting communications. In contrast, a graph database would recognize the connections that exist between the woman's account numbers, first name, date of birth, address and more.

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## Achieve your Single Customer View.

Pitney Bowes can help to position your company for more informed analytics and more relevant and personalized customer engagement. You'll gain the rapid insight you need to expedite customer qualification and onboarding, and deliver superior customer service.

We offer a Single Customer View solution that's quick to market and delivers a rapid return on investment. This single-platform solution utilizes graph-database technologies. It accesses, integrates, and reconciles customer data from across existing operational systems, and can be deployed in as little as two to four months.

This is one more way that Pitney Bowes provides an integrated approach to the business challenges you face. From data quality, customer profiling and omnichannel engagement, to global ecommerce, shipping and delivery, we'll help you connect to more value.

To learn more, visit us today at  
[pitneybowes.com](http://pitneybowes.com)



*"To counter the loss of control over the customer experience, harness customer data to offer tailored solutions and possibly new incentives to become the preferred, top-of-wallet choice in digital transactions."<sup>4</sup>*

<sup>1</sup> According to a research study fielded by the Digital Banking Report, cited by the report's co-publisher in <https://thefinancialbrand.com/62711/top-10-strategic-priorities-for-banking-in-2017/>

<sup>2</sup> <https://thefinancialbrand.com/62711/top-10-strategic-priorities-for-banking-in-2017/>

<sup>3</sup> Moore, C.S. (2017, January 24). How to Create a Business Case for Data Quality Improvement. Retrieved April 07, 2017, from <http://www.gartner.com/smarterwithgartner/how-to-create-a-business-case-for-dataquality-improvement/>

<sup>4</sup> Deloitte Center for Financial Services, Banking reimagined: How disruptive forces will radically transform the industry in the decade ahead, 2016.

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